

TWO NEW SPECIES OF *VERBESINA* (ASTERACEAE:
HELIANTHEAE) FROM OAXACA, MEXICO

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ABSTRACT

Verbesina textitlana B.L. Turner, **sp. nov.** and *Verbesina etlana* B.L. Turner, **sp. nov.** are described from Oaxaca, Mexico. The former belongs to the Sect. *Verbesinaria* DC., sensu Robinson and Greenman (1899), where it nestles next to *V. oaxacana* and cohorts; the latter relates to *V. scabrida* Rzed. and cohorts. Photographs of the types are provided, along with maps showing distribution of the taxa concerned. *Phytologia* 94(3): 343-349 (December 1, 2012).

KEY WORDS: Asteraceae, Heliantheae, *Verbesina*, *V. scabrida*, *V. oaxacana*, Mexico, Oaxaca

Routine identification of Mexican Asteraceae has revealed the following novelties:

VERBESINA TEXTITLANA B. L. Turner, **sp. nov.** Fig. 1

Resembling *Verbesina oaxacana* DC. but having more numerous, somewhat smaller heads, the leaves smaller, darker green, more sparsely pubescent beneath, and the pales with sharply recurved apices.

Perennial herbs or shrubs, 1-2 m high. **Stems** purplish, pubescent with spreading or up-swept hairs. **Leaves** alternate, dark green, pinnately veined, mostly 7-10 cm long, 2.5-5.0 cm wide; petioles 2-15 mm long; blades narrowly to broadly oval, widest at or near the middle, grading into the petioles, sparsely pubescent above and below, mainly along the ribs, their margins serrulate. **Capitulescence** a terminal, corymbose panicle of 20 or more heads, the ultimate peduncles mostly

1-4 cm long. **Heads** hemispheric, 10-15 mm across, 6-8 mm high. **Involucre**s 3-4 mm high, the bracts ovate, arranged in 3-4 sub-equal series. **Receptacles** (in fruit) hemispheric, ca 2 mm across, 1 mm high; paleate, the pales linear-lanceolate, 3-4 mm long, the apices recurved. **Ray florets** ca 21, pistillate, fertile; lamina yellow, linear, 6-10 mm long. **Disk florets** numerous, yellow, the corollas ca 3 mm long; tubes pubescent, ca 1 mm long, the throat glabrous or nearly so. **Anthers** brown. **Achenes** (the body) ca 2 mm long, 1 mm wide, the pappus scales ca 1 mm long.

TYPE: MEXICO. OAXACA: Mpio. Santiago Textitlan, "Bosque de pino-encino, orilla de arroyo, suelo rojo." ca 1739 m, (16 41 24.4 N, 97 15 29.4 W), 8/10/2006, *Maria Ester Jacob Salinas 723* (Holotype: TEX).

ADDITIONAL SPECIMENS EXAMINED: MEXICO. OAXACA: Mpio. Santiago Textitlan, "Paraje Zacaton, Bosque de pino-encino, suelo negro," en Canada, ca 2500 m, 7/12/2006, *Salinas 1136* (TEX); "Cueva de Cucho, Bosque de pino-encino. suelo negro, ca 2356 m, 26/08/2006, *Marcos 285* (TEX); "Paraje la Hierba Santa, Vegetacion secundaria de bosque de pino-encino. suelo negro, orillo de arroyo," ca 1893 m, 21/10/2006, *Olazo 755* (TEX); "Lachixao paraje Pena de Chivo, Bosque de pino-encino. Suelo café." ca 2317 m, 7/9/2006, *Vasquez 369* (TEX).

Marcos 285, cited in the above, appears to be a form of this taxon having winged stems. All other collections of *V. textitlana* had stems that lacked wings. However, similar wing-phenomena have been found in yet other taxa of *Verbesina*, hence my reluctance to place undue emphasis on the character concerned.

Verbesina textitlana is clearly related to *V. oaxacana* but is readily distinguished by its coarser habit, larger heads, and the characters brought to the fore in the above diagnosis. Specimens obtained from Mpio. Santiago Textitlan are all very similar; however, those from Mpio. San Miguel de Puerto appear to approach *V. oaxacana*, but have the more numerous heads and technical characters of *V. textitlana*. Distribution of the two taxa in Mexico is shown in Map 1.

The species name derives from the Municipio in which the type was collected.

VERBESINA ETLANA B.L Turner, sp. nov. **Fig. 2**

Resembling *Verbesina scabrida* Rzed. but a perennial herb 30-100 cm high (vs shrub or subshrub 1.5-2.5 m high), with smaller leaves, the capitulescence a loosely knit, terminal, cymose-panicle composed of 20-30 heads (vs numerous heads arranged in stiffly divaricately branched cymose-panicles), and the disc floret having densely pubescent tubes (vs glabrous or nearly so).

Perennial herbs, reportedly 30-100 cm high. **Leaves** opposite, 8-13 cm long, 2-4 cm wide; petioles 0-2 mm long; blades oblanceolate, reticulate venose beneath, sparsely pubescent above and below, especially along the veins. the margins entire or weakly serrate. **Capitulescence** a terminal cymose-paniculate panicle of 20-30 heads, 5-7 cm high, and as wide, the ultimate peduncles, appressed-pubescent, 5-15 mm long. **Heads** 5-6 mm high, and as wide. **Involucres** narrowly to broadly campanulate, 4-5 mm high, and as wide; outer involucral bracts, mostly linear-ovate, 3-4 mm long, ciliate with rounded apices. **Disk florets** ca 20; corollas ca 5 mm long; tubes markedly pubescent; throats sparsely ciliate. **Anthers** brown. **Achenes** (immature) narrowly winged, glabrous; pappus scales 2-3 mm long.

TYPE: MEXICO. OAXACA: Distrito: ETLA; Mpio. San Felipe Tejalpa. La Pena. "Bosque de pino-encino. Sobre cerro." 17.3 37.3 N, 96 55 17.1 W, ca 2179 m, 06/10/2011, Mario Cruz (MAC) 388 (holotype, TEX).

ADDITIONAL SPECIMENS EXAMINED: MEXICO. OAXACA: Distrito ETLA. Mpio. San Felipe Tejalpa. Tierra de los Sanchez el Capulin, ca 2575 m, 08/09/2011, Morales 284 (TEX). Distrito Pochutla, Mpio. San Miguel del Puerto. El Encinal, "Bosque de Encino." 04/10/2003, Pascual 858 (TEX).

Morales 284 described the plant as an herb 30 cm high; the other two collectors reckon the plant to be an herb 1 m high. All specimens (numerous) of *V. scabrida* (including *V. costata* Fay, a later

name), seen by the present author were said to be shrubs 1.5-2.5 m high. The collection from Distrito Pochutla has heads superficially resembling *V. scabrida*, but otherwise appears to have the parameters of *V. etlana*.

The species is named for the Distrito Etlá, whence the type.

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LITERATURE CITED

- Robinson, B.L. and J.M. Greenman. 1899. Synopsis of the genus *Verbesina* with an analytical key to the species. Proc. Amer. Acad. Arts 34: 536-566.



Fig. 1. *Verbesina textitlana* (holotype).

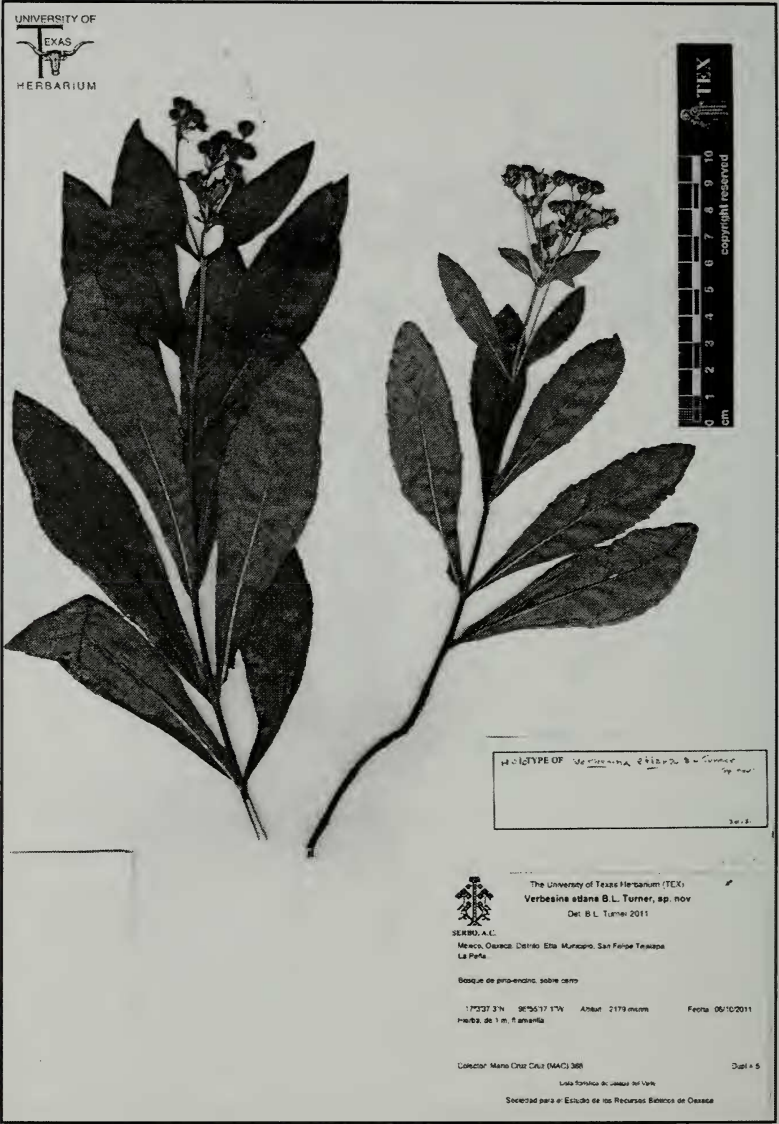


Fig. 2. *Verbesina etlana* (holotype).



Fig. 3. Distribution of *Verbesina textitlana* and *V. oaxacana*.

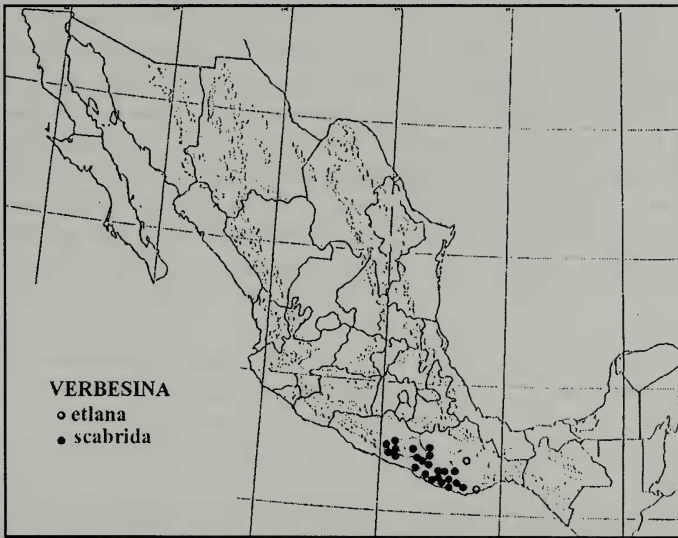


Fig. 4. Distribution of *Verbesina etlana* and *V. scabrida*.